Addendum
to the
National Pollutant Discharge Elimination System
Memorandum of Agreement
Between the
State of Indiana
and the
United States Environmental Protection Agency
Region 5
Concerning Indiana's Great Lakes Water Quality Standards
and Implementation Procedures Rulemaking

The federal Water Quality Guidance for the Great Lakes System (federal guidance), 40 CFR Part 132, contains the minimum water quality standards, antidegradation policies, and implementation procedures for the Great Lakes system to protect human health, aquatic life, and wildlife. The Great Lakes states and tribes were required to adopt provisions consistent with (as protective as) the federal guidance for their waters within the Great Lakes System. The Indiana Water Pollution Control Board adopted Great Lakes system water quality standards and implementation procedures on December 16, 1996, and these rules became effective on February 13, 1997.

The United States Environmental Protection Agency Region 5 (EPA) and the Indiana Department of Environmental Management (IDEM) enter into this Addendum to their National Pollutant Discharge Elimination System (NPDES) Memorandum of Agreement to ensure that Indiana's rules concerning Great Lakes system water quality standards and implementation procedures at 327 IAC 2-1.5 and 327 IAC 5-2 are implemented in a manner that is consistent with the federal guidance.

The duties in this Addendum only apply to those portions of Indiana's NPDES program applicable to the Great Lakes system within Indiana.

I. Chemical Specific Reasonable Potential Implementation Procedures

A. Development of Preliminary Effluent Limitations

327 IAC 5-2-11.5(b)(1) allows IDEM to exercise best professional judgment, taking into account the source and nature of the discharge, existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, and, where appropriate, the dilution of the effluent in the receiving water, in determining whether to develop preliminary effluent limitations (PELs). To ensure that IDEM's exercise of best professional judgment in determining whether to develop PELs pursuant to 327 IAC

5-2-11.5(b)(1) is exercised in a manner consistent with 40 CFR Part 132, Appendix F, Procedure 5, IDEM and EPA agree as follows:

1. IDEM agrees always to develop a PEL when it is necessary to conduct a reasonable potential analysis to determine if a water quality-based effluent limitation is needed. IDEM uses two computer modeling programs to calculate WQBELs (or PELs), one for dissolved oxygen and ammonia and one for Tier I and Tier II criteria. IDEM always determines PELs for these pollutants or pollutant parameters. Regardless, IDEM reserves the right to exercise best professional judgment not to develop a PEL only when it can determine without use of the reasonable potential procedure that a discharge will not cause or contribute to a violation of a water quality standard.

2. When IDEM exercises best professional judgment to not develop a PEL, IDEM shall explain with specificity in the permit fact sheet the basis for its decision. When IDEM submits the draft permit and fact sheet to EPA for review, IDEM shall specifically note to EPA that IDEM exercised best professional judgment to not develop a PEL, and that the reason for the determination is explained in the fact sheet.

3. If EPA determines that IDEM's exercise of best professional judgment to not develop a PEL is not consistent with the requirements of 40 CFR Part 132, Appendix F, Procedure 5, EPA may object to the issuance of the permit as being outside the guidelines and requirements of 40 CFR Part 132, Appendix F, Procedure 5 and the Federal Water Pollution Control Act. If EPA determines that IDEM's determination not to develop a PEL is consistent with 40 CFR Part 132, Appendix F, Procedure 5, EPA will not object to the issuance of the permit based solely on the grounds that IDEM exercised best professional judgment to not develop a PEL.

B. Projected Effluent Quality Procedures

327 IAC 5-2-11.5(b)(1)(B)(ii) describes how to determine the monthly average when monthly average data are not available. To ensure that this provision is implemented in a manner consistent with 40 CFR Part 132, Appendix F, Procedure 5, IDEM and EPA agree as follows:

1. 327 IAC 5-2-11.5(b)(1)(B)(ii), read as a whole, generally concerns a monthly average, not monthly projected effluent quality (PEQ). IDEM interprets both instances where "monthly PEQ" appears in the second sentence to actually mean "monthly average". Therefore, when an alternate method is used to determine a monthly average value, this value will be multiplied by the relevant multiplying factor from Table 11.5-1 in 327 IAC 5-2-11.5(h) to determine a monthly PEQ.

2. IDEM shall allow use of an alternative statistical procedure for determination of a PEQ only if the permit applicant demonstrates that the alternate statistical procedure meets the criteria in 327 IAC 5-2-11.5(b)(1)(B)(v). EPA shall retain the authority to object to permits that have been developed using statistical procedures that do not meet the criteria outlined in 40 CFR Part 132, Appendix F, Procedure 5, Paragraph B.2.

C. Developing Data Where There are Insufficient Data to Derive a Tier II Value

327 IAC 5-2-11.5(b)(3)(B) provides that IDEM need not generate data to develop a Tier II value in situations where it otherwise would be required to do so under 327 IAC 5-2-11.5(b)(3)(A) if the discharger demonstrates that "the whole effluent does not exhibit acute or chronic toxicity [and] through a biological assessment, that there are no acute or chronic toxic effects on aquatic life in the receiving stream." 327 IAC 5-2-11.5(b)(3)(B)(iii) gives IDEM discretion to not generate data to develop a Tier II value in certain situations where there has not been a biological assessment. IDEM recognizes that the federal guidance does not allow IDEM to exercise this discretion. Therefore, IDEM will always generate data to develop a Tier II value as required under 327 IAC 5-2-11.5(b)(3)(A) unless the discharger demonstrates that the whole effluent does not exhibit acute or chronic toxicity and through a biological assessment that there are no acute or chronic toxic effects on aquatic life in the receiving stream.

D. Intake Pollutants - Combined Wastestreams

327 IAC 5-2-11.5(b)(4)(C)(ii) and (g)(6) contains provisions for combined wastestreams consisting of both intake water and process wastewater (combined wastestreams provisions). The federal guidance contains no similar provisions. To ensure that 327 IAC 5-2-11.5(b)(4)(C)(ii) and (g)(6) are implemented in a manner consistent with 40 CFR Part 132, Appendix F, Procedure 5, IDEM and EPA agree as follows:

1. The combined wastestream provisions at 327 IAC 5-2-11.5(b)(4)(C)(ii) and (g)(6) do not allow discharge of a greater amount of pollutants than would be allowed under the federal guidance provisions applicable to the entire wastestream. IDEM will interpret and apply 327 IAC 5-2-11.5 (b)(4)(C)(ii) and (g)(6) as allowing the state flexibility to consider each wastestream separately in determining the most effective way to establish water quality controls (e.g., monitoring points), but not as a means to impose less stringent controls on the discharge than would otherwise apply. In cases where one of the wastestreams consists of stormwater, the provisions at 327 IAC 5-2-11.5 (b)(4)(C)(ii)(BB) and (g)(6)(A), which state that "[t]he requirements imposed shall be as if the storm water wastestream discharged directly into the receiving waterbody and shall be consistent with requirements imposed on other similar storm water discharges to the waterbody," will be interpreted to require controls for internal storm water waste streams

that mix with process waste streams before discharge consistent with controls imposed on direct discharges of storm water mixed with process water before discharge.

2. When issuing permits, IDEM shall make a combined wastestream determination in accordance with its rules as explained in its demonstration. When IDEM makes a decision in a permit involving its combined wastestream provisions, IDEM shall explain with specificity in the permit fact sheet the basis for its decision. When IDEM submits the draft permit and fact sheet to EPA for review, IDEM shall specifically note to EPA its combined wastestream determination, and that the reason for the determination is explained in the fact sheet.

3. If EPA determines that IDEM's combined wastestream decision is not consistent with 40 CFR Part 132, Appendix F, Procedure 5, EPA may object to the issuance of the permit as being outside the guidelines and requirements of 40 CFR Part 132, Appendix F, Procedure 5 and the Federal Water Pollution Control Act. If EPA determines that IDEM's combined wastestream decision is consistent with the requirements of 40 CFR Part 132, Appendix F, Procedure 5, EPA will not object to issuance of the permit based solely on the grounds that IDEM used its combined wastestream provisions.

E. Intake Pollutants - Noncontact Cooling Water

327 IAC 5-2-11.5(g) contains provisions concerning issuance of water quality-based effluent limitations for once-through noncontact cooling water discharges. To ensure that 327 IAC 5-2-11.5(g) is implemented in a manner consistent with 40 CFR Part 132, Appendix F, Procedure 5, IDEM and EPA agree as follows:

1. 327 IAC 5-2-11.5(g) is not expressly limited to situations where the intake and outfall points are located on the same body of water. 40 CFR Part 132, Appendix F, Procedure 5, Paragraphs D and E require the intake and outfall points to be located on the same body of water in order for a discharger to qualify under the intake pollutant provisions. To ensure that 327 IAC 5-2-11.5(g) is only applicable to situations where the intake and outfall points are located on the same body of water:

> IDEM shall not issue any permits allowing intake credits where the once-through noncontact cooling water intake and outfall points are located on different bodies of water.

2. 327 IAC 5-2-11.5(g)(1) states the IDEM may require a water quality-based effluent limitation based on an acute aquatic criterion for a substance or acute whole effluent toxicity when information is available to indicate that such a limit is necessary to protect

aquatic life, unless the substance or whole effluent toxicity is due solely to its presence in the intake water. 40 CFR Part 132, Appendix F, Procedure 5 requires a water quality-based effluent limitation in all cases when a limit is necessary to protect aquatic life, wildlife, or human health water quality standards, unless the discharge qualifies under the intake pollutant provisions in 40 CFR Part 132, Appendix F, Procedure 5, Paragraphs D and E. To ensure that IDEM always issues water quality-based effluent limitations unless the substance or whole effluent toxicity is due solely to its presence in the intake water:

IDEM shall exercise its discretion in 327 IAC 5-2-11.5(g)(1) to always require a water quality-based effluent limitation based on an acute aquatic criterion for a substance or acute whole effluent toxicity when information is available indicating that such a limit is necessary to protect aquatic life criteria unless the substance or whole effluent toxicity is due solely to its presence in the intake water.

3. 327 IAC 5-2-11.5(g)(3) states that if a substance is present at elevated levels in the noncontact cooling water wastestream due to improper operation and maintenance of the cooling system, the wastestream must be evaluated under the reasonable potential procedures in 327 IAC 5-2-11.5(b). IDEM considers pollutants added to the wastestream as a result of corrosion and erosion to be "elevated levels due to improper operation and maintenance," and shall evaluate a wastestream under 327 IAC 5-2-11.5(b) if a pollutant is present at elevated levels due to corrosion and erosion.

4. While 327 IAC 5-2-11.5(g)(1) only expressly applies to water quality-based effluent limitations based on acute aquatic life criteria and acute whole effluent toxicity, 327 IAC 5-2-11.5(g)(2) through 327 IAC 5-2-11.5(g)(6) authorize IDEM to undertake a reasonable potential analysis and issue water quality-based effluent limitations based on other criteria and standards. IDEM shall issue water-quality based effluent limitations based on an acute or chronic aquatic life, wildlife or human health criterion whenever information is available to indicate that the discharge causes, or has the reasonable potential to cause an exceedance of the criterion or standards.

III. Loading Limits for Wet Weather Flows

327 IAC 5-2-11.6(g)(4) allows dischargers to request tiered mass limits for discharges that increase as a result of wet weather flow. To ensure 327 IAC 5-2-11.6(g)(4) is implemented in a manner consistent with 40 CFR Part 132, Appendix F, Procedure 7, IDEM and EPA agree as follows:

A. IDEM interprets the language of 327 IAC 5-2-11.6(g)(4) to require the issuance of a concentration limit along with the tiered mass limits.

B. If a discharger requests tiered mass limits, IDEM always will issue a permit with a concentration limit along with the tiered mass limits.

IV. Water Quality-Based Effluent Limitations Below the Level of Quantification - Pollutant Minimization Plan Monitoring

327 IAC 5-2-11.6(h)(7)(A)(iii) states that the pollutant minimization plan shall include monitoring necessary to monitor progress toward the goal of maintaining the effluent at or below the water quality-based effluent limitation. To ensure that 327 IAC 5-2-11.6(h)(7)(A)(iii) is implemented in a manner consistent with 40 CFR Part 132, Appendix F, Procedure 8, Paragraph D, IDEM and EPA agree that, at a minimum, IDEM always will require semi-annual monitoring of potential sources of the pollutant at issue and quarterly monitoring for the pollutant in the influent of the wastewater treatment system, unless information generated by the pollutant minimization plan supports a request for less frequent monitoring or no monitoring requirements.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

By: Lori F. Kaplan

Lori F. Kaplan
Commissioner

Date: 4-17-00

U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 5

By: Francis X. Lyons

Francis X. Lyons
Regional Administrator

Date: 7/28/00